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NEWSLETTER
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c/o DEPARTMENT OF BOTANY
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IMPORTANCE TO THE PEOPLE OF HAWAII OF CONSERVATION OF NATURAL SCENIC RESOURCES.[1]

Robert Wenkam [2]

Agee Hall, H.S.P.A. Experiment Station
February 6, 1967

The problems of poor planning and overpopulation we are faced with today can be blamed completely on the native Hawaiians. Frankly, they had a lousy immigration policy.

Our problem was aggravated by the first haole fellow off a whaling ship in Lahaina. I do not at the moment recall his name. But, by the time he had taken his first few steps toward the nearest bare-bosomed native girl, a spear whizzed by his ear and hit a tree close by. When he turned to see who had thrown the spear, he could not see the man because the native was hiding behind a tree. From that early incident to this time, Americans have had it in for trees. Banyan or otherwise.

The point is, whether or not this version of history is true, there is an attitude among Americans to explain how we feel about things, and what we think about things. It

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[1] A lecture presented at the February 6, 1967 meeting of the Hawaiian Botanical Society.

[2] Hawaii Vice-President, Federation of Western Outdoor Clubs.

SHOUT
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IT

is the attitude you can see gleaming in the eye of the bulldozer operator who is about to clear land for a new subdivision. If there is a single tree in fifty acres of land, it will be his primary target.

It is also the apparent attitude of the Honolulu Council Chairman, to whom I suggest the city widen Keeaumoku Street by two lanes on the side of the street across from the banyan, to save the tree from destruction. He said it could not be done because there would then be an unsafe curve in the street. It didn't bother him at all to widen Keeaumoku two lanes on the side of the street across from the theater two blocks up in order to save the theater. The apparent duplicity does not concern him -- theaters are obviously worth more than 100-year-old banyans. I might also add that theaters can be replaced, but 100-year-banyans are lost forever.

Keeaumoku Street, when improved by the street widening program, will have a bend in it -- not to save a tree, however, but to save a theater.

I mock the hypocrisy of a country that celebrates the adjournment of a natural beauty congress by ordering the destruction of one of its most famous and oldest banyan trees -- in the name of progress.

Has the much quoted "we are paving the Islands with asphalt" actually begun? Is it really true, as the Council seems to indicate, that moving automobiles is more important than natural beauty? Will apartments and hotels soon become more important than Diamond Head?

Being for conservation has become a little like being for mother-hood and against sin. Everyone is for conservation. But it is how, and where, and at what cost, that land and trees are conserved, that separates the men from the boys. When we pull down a building to save a tree, we can call ourselves men.

The boys are out covering our island with asphalt. Hacking out our graceful hills for new urban sprawl. Destroying irreplaceable forests, polluting the shoreline and poisoning the air. The boys seem hell-bent on destruction in their greed to take and return as little as they can. Their "moral obligation" is to themselves. Their progress is at the expense of future generations.

The Executive Director of the Hawaii Foundation on Culture and the Arts, Alfred Preis, returned from Washington with the good news that Hawaii has been recognized by the National Council for the Arts as a "National Treasure." Our first response to this honor is apparently going to be the roar of chain saws destroying one of the largest banyan trees in the state.

It has become increasingly evident that we cannot continue to put all our land under pavement to permit man to drive his own one-ton vehicle from bed to desk. It is not good economics or good land use. We must stop being slaves to automobiles.

Are we going to continue measuring the welfare of our community by the number of cars we can get through an intersection per square minute -- or by the size and beauty of our parks and trees? If you take your girl on a picnic, the value of the picnic is not measured according to the number of blankets per acre. We are turning God's own country into God's own junkyard. Let us reverse the trend and save our city. Let us find a better way to move people before destroying our way of life.

Man is soul as well as body. Apparently, what we're trying to do is save thirty seconds by destroying a tree that required 100 years to grow. What are we going to do with the thirty seconds? I'll take the thirty seconds to enjoy the cool shade of the banyan and I think there is a growing number of people who would choose this option -- if they just had the choice of an option.

While looking through the City's file, a member of the traffic engineering staff at City Hall told me, "We are not concerned with aesthetics in this office -- our job is to move traffic." I have the impression from talking with many of our city department employees that no one is concerned with aesthetics and no one ever has been. There is plenty of talk for public consumption but the dialogue of good intentions never reaches the drawing boards.

What traffic problem will be solved by cutting down the banyan and widening King and Keeaumoku Streets? All City Hall will be doing is moving the traffic bottleneck to a different location. We gain nothing and lose a tree.

How many of us live in Hawaii simply because it is beautiful? Or because the water is clean and the sky clear?

Hawaii is probably more dependent upon natural beauty than any other state in the nation. Natural beauty is the major asset of our multi-million dollar industry -- tourism, which generated $383 million for Hawaii in 1964. Yet, we carefully destroy portions of our scenery every day -- as if we could go out and replace it next month by ordering a new batch from the mainland. Or planting a new variety as if it were sugar cane.

We seem to have forgotten, in our complacency, that the God-given natural beauty we have today is all we ever will have. What we destroy today is lost forever. What we save today is all that ever will be saved.

The nurserymen and landscape architect cannot replace it. At most, they are only the Elizabeth Ardens of the earth. The nurseryman provides the cosmetics that youthful excess demands to cover up our damaged face, but even Elizabeth Arden knows the limitations of lipstick and falsies.

The developer who bulldozes out a hillside and then expects the landscape architect to cover up his crime with selected trees is selling his community short. He reveals his contempt for natural beauty and ignorance of natural beauty. We must beware of joining into an unholy compromise with short-sighted developers whose first desire is profit, community second. In serving the developer, the landscape architect must not be fooled into thinking he can replace God.

Nor can we allow ourselves for a moment ot be fooled by a city which claims to plant 3,000 trees a year, but fails to tally up any of its losses. A city that boasts of beautifying Nimitz Highway, yet fails to mention what leeward community was denuded of coco palms to hide the zoning crimes of a short-sighted City Council. A city that strips the Kukui urban renewal lands of banyan trees for the new Aala Park. A city that starts cutting down the mahogany trees on Kalakaua before dawn -- I guess so no one would see how many extra they cut down "by accident." We are not making the city any greener, nor are we actually planting more trees than we cut. We are perpetrating a great hoax on the people of Hawaii, as we move trees from one side of the island to

another -- like a gigantic shell game with the people as suckers. But, I don't think we are fooling anybody -- but ourselves.

We must not take Hawaii's natural beauty for granted, no less than we take our political freedoms for granted. If we are to keep them, we must fight for them and as the battle is joined, recognize the importance of natural beauty in our daily lives and not allow its disappearance by default.

Honolulu must be one of the least attractive cities in the United States and probably the most poorly planned -- if any planning has entered into it at all. We are saved only by dramatic green mountains mauka, beautiful floating clouds overhead, and the bluest of oceans makai. We only need raise our heads from the man-made shambles of Honolulu, and natural beauty surrounds us. We are indeed fortunate.

Yet, under the guise of economic development, we are methodically destroying this unique relationship of God and man.

We are building walls of concrete and steel to block out the ocean. Highway ramps sever the horizon. Bulldozer blades carve out 35,000-year-old volcanic cinder cones into cut banks that will not even support grass. In defiance of the law, trees and hillsides are reduced to rubble. The most famous landmark of the world, Diamond Head, is irreparably gouged out on its back shoulder while callous apartment builders crush its toes. Even the blue sky overhead and the ocean at our feet are gradually being polluted with smoke and smog and filth.

We sit here in our little island paradise -- smug, satisfied; claiming that we live in the most beautiful city in the most beautiful state. Yet, as we look around, I think even the most self-assured may have some doubts.

Where are the community leaders to set an example for us? Well, the two largest banks have constructed high-rise business buildings in the heart of Waikiki -- a resort center on which the Hawaii Visitors Bureau has lavished thousands of dollars over the years as a South Pacific Paradise. The buildings are very sympathetic to this theme, of course. One of them looks like a World War I fortification! It has a restaurant on top with a spinning casserole, and they have the nerve to light it up at night.

Other more influential members of our community are busy influencing the planning commission so they may build high-rise apartment hotels that will cover the slopes of Diamond Head. How selfish can you get?

Apparently we are not to criticize this desecration of our land -- or of our community. The claim is that we would be violating the sanctity of private property, the right to make a profit from private land apparently regardless of the consequences. Is this really one of our vaunted American freedoms?

We must learn that our freedoms are not demonstrated by sheer irresponsibility. We must learn, to the contrary, that the earth is common ground and all of us are its landlords, whether we hold title or not. The land must be held in safekeeping for the economic benefit and welfare of all our community for this generation and the next. We owe it at least to our children to keep Hawaii beautiful for them -- and their children.

It must become contrary to the public good to allow an individual to destroy any part of our land; our natural beauty; or even the view.

The whole state suffers whenever we overlook an invasion of our hillsides. The entire nation suffers whenever there is a needless violation of Diamond Head -- or the view from the Pali. These are national treasures. When they are gone, they will never be seen again. They now become dim before our eyes.

The Keeaumoku banyan has grown quietly for 100 years. When the chain saws are put to its trunk, it will die in minutes. But when it falls, its death crash will be heard throughout the world.

As Nobel Prize winner Albert Camus wrote of himself, "I cannot help from being drawn toward everyday life, toward those, whoever they may be, who are humiliated and debased. It seems to me impossible to endure that idea, nor can he who cannot endure it lie down to sleep in his tower."

The murderers of our beauty will be reminded of their crime forever. We are the murderers.

PLANTS WITH RHYTHM [1]

Douglas J.C. Friend [2]

Many natural processes are rhythmical, from the rapid beat of flagellae to the seasonal pattern of leaf emergence, flowering and fruiting in temperate climates. While the rhythmic response of plants is clearly controlled by the environment in many cases, such as the timing of flowering by the long days of summer or by the short days of fall, other responses may be controlled by a rhythm inherent in the growth and development of the plant itself. The daily sleep movements shown by the leaves of many leguminous trees and shrubs may continue for several days in a constant environment. The opening of petals, release of perfume and secretion of nectar so well synchronised with the activities of pollinating insects may also continue to reach a morning or evening peak even under continuous light or constant darkness.

These endogenous patterns of rhythmic change can also occur at the cellular level, as in the photosynthetic ability of some algae and the peculiar pattern of carbon-dioxide uptake during the dark period exhibited by many succulents. Evidence that these changes are truly endogenous, and not controlled by some, as yet unknown, causal external factor, such as the daily change in the earth's magnetic field, is provided by the fact that many of these plant responses are not exactly timed to a 24-hour cycle when placed in continuous light or darkness. The "biological clock" timing these activities must reside within the cytoplasm itself. Removing the nucleus from a unicellular alga such as Acetabularia does not prevent the continuation of a rhythm in photosynthetic ability

1/ A lecture presented at the January 9, 1967 meeting of the Hawaiian Botanical Society.

2/ Associate Professor of Botany, University of Hawaii.

Wherever its location and whatever its mechanism, the biological clock seems to be important for synchronising the activities of both plants and animals with periodic changes in the environment. It is found in both simple unicellular forms of life as well as in insects and mammals. The incredible navigation feats of birds and the foraging flights of bees may also rely on an endogenous clock, which is used in conjunction with the position of the sun for determining direction.

For further reading you may find E. Bunning's "The Physiological Clock" interesting and for an "anti-endogenous" view, Frank Brown's article "The rhythmic nature of animals and plants" in "American Scientist", June 1959.

NOTICE OF

HAWAIIAN BOTANICAL SOCIETY FORAY

The annual foray of the Hawaiian Botanical Society will be held on July 4, 1967. It will be led by Thomas R.L. McGuire, former Territorial Forester. The foray will go to the Waianu Trail, on the windward side of Oahu, between Waikane and Waiahole. The group will meet at the H.S.P.A. Experiment Station parking lot, 1527 Keeaumoku Street, at 9 A.M. on July 4. Bring lunch and water.

BOTANICAL SOCIETY NEWSNOTES

Science Fair Awards: The Hawaiian Botanical Society presented two awards to exhibits in the Intermediate Division of the Hawaiian Science Fair. An award of $25 was presente to Cheryl Ling of R.L. Stevenson School, for her exhibit entitled "The photeolic respons of Mimosa pudica." An award of $15 was presented to Bernice Ushijima and Susan Yokoyama of Kula Elementary School, Maui for their exhibit on "The effect of rooting compounds on carnation slips."

Standing Committee on Pacific Botany: Dr. Maxwell S. Doty, Professor of Botany at the University of Hawaii, has been named Chairman of the Standing Committee on Pacific Botany of the Pacific Science Association. He replaces Dr. F. Raymond Fosberg who resigned after serving three terms in the office.

Gift to Society: The Hawaiian Botanical Society has received a gift of $7,391.25 from the estate of Marie C. Neal. This is in addition to a previous bequest of $500. Miss Neal, for many years Botanist at the Bernice P. Bishop Museum, was a Charter Member and an Honorary Life Member of the Society. An account of her contributions to Hawaiian botany appeared in October 1965, Hawaiian Botanical Society Newsletter IV: 19-21.

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